62 were positive. There were 644 "school contacts" examined, of which, 28 were positive. Therefore, a total of 1178 contacts were examined, with 90 of them positive. The chief point here is the proportion of contacts found positive to contacts examined, and the relative proportion of positive home contacts to school contacts. All school carriers were found intimately associated at play with other cases and carriers. Classroom proximity was found of little importance in spreading the disease. In the home the positive cases were found in greatest number among those in closest communication, the same holding for playmates in the street and at school. This evidence shows the very intimate means necessary for the transmission of diphtheria, and indicates how readily this progress may be prevented by bacteriological examination and detection of positive cases. This series of 90 cârriers exhibits four definite groups: (1) Those showing no clinical evidence of diphtheria and in whom the bacillus is found for a short time; (2) those giving a history of "cold," "sore throat," "mumps," etc., some time previously. They may exhibit paralysis and are neglected cases of diphtheria; (3) cases without a clinical history but with some local lesion of the throat, nose, ear, etc., where the bacillus lodges; (4) those who have had a definite attack of diphtheria and in whom the bacillus remains for long periods after convalescence. The fate of the bacillus when it disappears is not obvious. It probably disappears before the growth of some other organisms developing in that environment. However, experiments in implanting organisms inimical to the bacillus have so far been unsuccessful. Antitoxin has no apparent effect on the persistence of the bacillus in carriers any more than in cases. The length of carrier life seems to have no effect on virulence, bacilli being virulent after four and eight months in the nose and ear. Carriers occur most among intimate associates, mother or nurse and child, child and child at play. At school the carriers found are few and always closely associated with some other carrier or case, usually at play. The control of diphtheria depends on controlling the carrier. All carriers should be notified as diphtheria, quarantined, and observed until the disappearance of the bacillus. There is a slow, inevitable distribution of the disease persisting endemically in the carriers.

Etiology of Poliomyelitis.—A. E. VIPOND (*British Med. Jour.*, 1911, No. 2620, p. 612) draws a new conclusion as to the etiology of poliomyelitis from observations made on 16 cases of the disease. He remarks that Flexner established the infectious nature of the disease, and from his experiments it is shown that the inoculation time is practically the same as in typhoid fever. The virus passes through the finest filters, but sections and film preparations have failed to show bacterial or protozoal parasites as causing the infection. He quotes Holt as to the frequency of finding two or more cases in the same family. In 37 of the cases the interval between the first and second cases was ten days or less. This points to the contagious nature of the disease. The above conditions appearing in his own cases led to the thought of similarity between typhoid fever and poliomyelitis. Both diseases occur in the late summer and fall months, becoming almost extinct during cold weather. Diarrhea is just as common a symptom in poliomyelitis as in typhoid fever. The incubation period is practically the same in both diseases. Flexner found it thirteen days experimentally, and Holt ten days clinically, in poliomyelitis. Both diseases are prevalent in cities where and when the cause of typhoid fever is traceable to the water and milk supply. They are both less frequent where the water and milk are pure. It is practically the same degree of contagion. These observations suggested the same character of organism as in typhoid fever. In blood examinations in cases of poliomyelitis he found the Widal reaction present as in typhoid fever, proving to him conclusively that the disease is from the same source and that the germs of the two diseases are allied. He asserts that the precautions used to prevent typhoid fever will have the same effect on the spread of poliomyelitis. He examined for the Widal reaction the blood of 13 cases of poliomyelitis, and 3 normal cases of members of infected families to prove the Widal reaction was not a family peculiarity. The Widal reaction was positive in 6 cases, highly suggestive in 4 cases, and negative in 6 cases, among which were the 3 from the healthy individuals. Out of the 3 negative results in the affected cases, 2 were obtained from cases of poliomyelitis from two and one-half to three months after the onset of the disease, and both were mild cases. This compares fairly well with the results found in an equal number of typhoid fever cases. Typhoid fever attacks the adult's weakest part, the intestine. Poliomyelitis attacks the most vulnerable part of the child and infant, the nervous system. The blood specimens in this series were examined by physicians making a specialty of that work. When a specific serum shall have been perfected, Vipond would make, as indications for its employment, a suspicious case with a positive Widal reaction. This should have the effect of modifying or preventing the disease.

Slight General Enlargement of the Thyroid Gland in School Children.—C. W. Hutt (*Lancet*, 1911, clxxx, 875) calls attention to the number of cases of slight enlargement of the thyroid gland found in the examination of school children. The enlargement was not connected with anemia, mental hebetude, increased pulse rate, fine tremor of the hands, or exophthalmos. There was no pain or tenderness. In the district of Warrington, out of 3982 males examined, 37 showed enlargement of the thyroid. Out of 3787 females, 62 showed enlargement. According to the tables on the age in these cases the condition is not most frequent at the age of puberty, as 72 cases of the 99 occur below the age of thirteen. The above figures seem to show that the cause of enlargement in a large proportion of cases lies elsewhere than in the incidence of puberty. The water supplying the above district is a hard water, carrying, per gallon, calcium carbonate, 8.14 grains; magnesium carbonate, 2.63 grains; sodium chloride, 2.64 grains; and the total mineral salts running 15.06 grains per gallon. It is not known whether this quality of water has any effect on this condition, as it is supposed to have in the Alps. Out of 6 families of affected children examined, 3 showed a similar enlargement of the thyroid in several other members of the family. In one family of 9 people, 8 were affected. Hutt suggests that observation of this condition in the course of routine medical inspection of school children might throw light on the etiology.